

Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claim 1 (Canceled)

Claim 2 (Currently amended): The method as recited in claim 1, wherein A method of delivering a therapeutic agent to selected sites within an organism, comprising the steps of:

identifying the selected sites for delivering the therapeutic agent;

selecting a catheter having a tubular section and a solid catheter tip, the tubular section having a proximal end and a distal end, the distal end attached to the solid catheter tip, the tubular section comprising solid sections and microporous membrane sections, each of the catheter microporous membrane sections including further comprises, a first end and a second end, the first end and the second end coupled to the solid sections forming a continuous cross section of the tubular section;

placing the catheter in the organism so that the microporous membrane sections are placed at the selected sites;

coupling the catheter to a pump for delivering the therapeutic agent to the selected sites; and

actuating the pump to deliver the therapeutic agent to the selected sites through the microporous membrane sections.

Claim 3 (Currently amended): The method as recited in claim 24, wherein the ~~catheter~~ solid tubular section comprises a radio opaque material.

Claim 4 (Currently amended): The method of claim 24, wherein the pump is an implantable pump.

Claim 5 (Currently amended): The method of claim 24, wherein the pump is an external pump.

Claim 6 (Canceled)

Claim 7 (Currently amended): The method as recited in claim 6, wherein A method of delivering a therapeutic agent to selected sites within an organism, comprising the steps of:

identifying the selected sites for delivering the therapeutic agent;
selecting at least two catheters, the at least two catheters each comprising a tubular section and a solid catheter tip, the tubular section having a solid section and a microporous membrane section, the catheter microporous membrane section including further comprises, a first end and a second end, the first end and the second end coupled to the solid section forming a continuous cross section of the tubular section;

placing the catheters in the organism so that the microporous membrane sections are located at the selected sites;

connecting each catheter proximal end to a manifold,
coupling the manifold to a pump for delivering the therapeutic agent to the selected sites; and
actuating the pump to deliver the therapeutic agent to the selected sites.

Claim 8 (Currently amended): The method as recited in claim 76, wherein the ~~catheter~~ solid tubular section comprises a radio opaque material.

Claim 9 (Currently amended): The method of claim 76, wherein the pump is an implantable pump.

Claim 10 (Currently amended): The method of claim 76, wherein the pump is an external pump.

Claims 11-14 (Canceled)

Claim 15 (Currently amended): A method of delivering a therapeutic agent to selected sites within an organism, comprising the steps of: The method as recited in claim 11,

identifying the selected sites for delivering the therapeutic agent;

selecting a catheter having a tubular section, the tubular section including a solid section and

at least two diffusion sections, the at least two diffusion sections longitudinally aligned from a distal end corresponding to the selected sites;

placing the catheter in the organism so that the at least two diffusion sections are placed at the selected sites;

coupling the catheter to a pump for delivering the therapeutic agent to the selected sites;

actuating the pump to deliver the therapeutic agent to the selected sites; and

wherein the catheter tubular section further comprises, an outer tubular wall and an inner tubular wall, the outer tubular wall having at least one opening within each of the at least two diffusion sections through to the inner tubular wall, the inner tubular wall lined with a microporous membrane.

Claim 16 (Canceled)

Claim 17 (Currently amended): The method as recited in claim 15, A method of delivering a therapeutic agent to selected sites within an organism, comprising the steps of:

identifying the selected sites for delivering the therapeutic agent;

selecting a catheter having a tubular section, the tubular section including a solid section and at least two diffusion sections, the at least two diffusion sections longitudinally aligned from the distal end corresponding to the selected sites;

placing the catheter in the organism so that the at least two diffusion sections are placed at the selected sites;

coupling the catheter to a pump for delivering the therapeutic agent to the selected sites;

actuating the pump to deliver the therapeutic agent to the selected sites;

wherein the tubular section further comprises, an outer tubular wall and an inner tubular wall, the outer tubular wall having at least one opening within each of the at least two diffusion sections through to the inner tubular wall, the inner tubular wall lined with a microporous membrane; and wherein the catheter microporous membrane further comprises, an outer area and an inner area, the outer area having an interference fit with the inner tubular wall.

Claim 18 (Canceled)

Claim 19 (Currently amended): The method of claim 174, wherein the pump is an implantable pump.

Claim 20 (Currently amended): The method of claim 174, wherein the pump is an external pump.

Claim 21 (Currently amended): A method of delivering a therapeutic agent to selected sites within an organism, comprising the steps of:

identifying the selected sites for delivering the therapeutic agent;
selecting at least two catheters, the at least two each catheters comprising a tubular section, the tubular section having a solid section and a diffusion area, and an outer tubular wall and an inner tubular wall, the outer tubular wall having at least one opening through to the inner tubular wall, the inner tubular wall lined with a microporous membrane;
placing each catheter in the organism so that the diffusion area is sections are located at the selected sites;
connecting each catheter proximal end to a manifold,
coupling the manifold to a pump for delivering the therapeutic agent to the selected sites; and
actuating the pump to deliver the therapeutic agent to the selected sites.

Claim 22 (Original): The method as recited in claim 21, wherein the catheter solid tubular section comprises a radio opaque material.

Claim 23 (Original): The method as recited in claim 21, wherein the catheter microporous membrane is located in the diffusion area.

Claim 24 (Original): The method as recited in claim 21, wherein the catheter microporous membrane further comprises, an outer area and an inner area, the outer area having an interference fit with the inner tubular wall.

Claim 25 (Original): The method as recited in claim 23, wherein the catheter microporous membrane further comprises, an outer area and an inner area, the outer area having an interference fit with the inner tubular wall.

Claim 26 (Original): The method of claim 21, wherein the pump is an implantable pump.

Claim 27 (Original): The method of claim 21, wherein the pump is an external pump.

Claim 28 (Currently amended): A method of delivering a therapeutic agent to a selected site within an organism, comprising the steps of:

identifying the selected site for delivering the therapeutic agent;

selecting a catheter the catheter comprising a tubular section having a solid section and a diffusion area, and an outer tubular wall and an inner tubular wall, the outer tubular wall having at least one opening through to the inner tubular wall, the inner tubular wall lined with a catheter microporous membrane;

placing the catheter in the organism so that the diffusion area section is placed at the selected site;

coupling the catheter to a pump for delivering the therapeutic agent to the selected site; and actuating the pump to deliver the therapeutic agent to the selected site.

Claim 29 (Original): The method as recited in claim 28, wherein the catheter solid tubular section comprises a radio opaque material.

Claim 30 (Original): The method as recited in claim 28, wherein the catheter microporous membrane is located in the diffusion area.

Claim 31 (Original): The method as recited in claim 28, wherein the catheter microporous membrane further comprises, an outer area and an inner area, the outer area having an interference fit with the inner tubular wall.

Claim 32 (Original): The method as recited in claim 30, wherein the catheter microporous membrane further comprises, an outer area and an inner area, the outer area having an interference fit with the inner tubular wall.

Claim 33 (Original): The method of claim 28, wherein the pump is an implantable pump.

Claim 34 (Original): The method of claim 28, wherein the pump is an external pump.

Claims 35-38 (Canceled)

Claim 39 (Currently amended): The method as recited in claim 35, A method of delivering a therapeutic agent to selected sites within an organism, comprising the steps of:

identifying the selected sites for delivering the therapeutic agent;
selecting at least two catheters, the at least two catheters each having a proximal end and a distal end, the at least two catheters each having a tubular section, the tubular section including a solid section and at least two diffusion sections, the at least two diffusion sections longitudinally aligned from the distal end corresponding to the selected sites;

placing each catheter in the organism so that the at least two diffusion sections are located at the selected sites;

connecting each catheter proximal end to a manifold,

coupling the manifold to a pump for delivering the therapeutic agent to the selected sites; and
actuating the pump to deliver the therapeutic agent to the selected site; and
wherein the ~~catheter~~ tubular section further comprises, an outer tubular wall and an inner tubular wall, the outer tubular wall having at least one opening within each of the at least two diffusion sections through to the inner tubular wall, the inner tubular wall lined with a microporous membrane.

Claim 40 (Currently amended): ~~The method as recited in claim 39,~~ A method of delivering a therapeutic agent to selected sites within an organism, comprising the steps of:

identifying the selected sites for delivering the therapeutic agent;
selecting at least two catheters, the at least two catheters each having a proximal end and a distal end, the at least two catheters each having a tubular section, the tubular section including a solid section and at least two diffusion sections, the at least two diffusion sections longitudinally aligned from the distal end corresponding to the selected sites;
placing each catheter in the organism so that the at least two diffusion sections are located at the selected sites;
connecting each catheter proximal end to a manifold,
coupling the manifold to a pump for delivering the therapeutic agent to the selected sites; and
actuating the pump to deliver the therapeutic agent to the selected site; and
wherein the catheter tubular section further comprises, an outer tubular wall and an inner tubular wall, the outer tubular wall having at least one opening within each of the at least two diffusion sections through to the inner tubular wall, the inner tubular wall lined with a microporous membrane, wherein the ~~catheter~~ microporous membrane is located at the at least two diffusion sections.

Claim 41 (Currently amended): The method as recited in claim 39, A method of delivering a therapeutic agent to selected sites within an organism, comprising the steps of:

identifying the selected sites for delivering the therapeutic agent;

selecting at least two catheters, the at least two catheters each having a proximal end and a distal end, the at least two catheters each having a tubular section, the tubular section including a solid section and at least two diffusion sections, the at least two diffusion sections longitudinally aligned from the distal end corresponding to the selected sites;

placing each catheter in the organism so that the at least two diffusion sections are located at the selected sites;

connecting each catheter proximal end to a manifold,

coupling the manifold to a pump for delivering the therapeutic agent to the selected sites; and
actuating the pump to deliver the therapeutic agent to the selected site; and

wherein the catheter tubular section further comprises, an outer tubular wall and an inner tubular wall, the outer tubular wall having at least one opening within each of the at least two diffusion sections through to the inner tubular wall, the inner tubular wall lined with a microporous membrane, wherein the eather microporous membrane further comprisinges, an outer area and an inner area, the outer area having an interference fit with the inner tubular wall.

Claim 42 (Currently amended): The method as recited in claim 40, A method of delivering a therapeutic agent to selected sites within an organism, comprising the steps of:

identifying the selected sites for delivering the therapeutic agent;

selecting at least two catheters, the at least two catheters each having a proximal end and a distal end, the at least two catheters each having a tubular section, the tubular section including a

solid section and at least two diffusion sections, the at least two diffusion sections longitudinally aligned from the distal end corresponding to the selected sites;

placing each catheter in the organism so that the at least two diffusion sections are located at the selected sites;

connecting each catheter proximal end to a manifold,

coupling the manifold to a pump for delivering the therapeutic agent to the selected sites; and

actuating the pump to deliver the therapeutic agent to the selected site; and

wherein the catheter tubular section further comprises, an outer tubular wall and an inner tubular wall, the outer tubular wall having at least one opening within each of the at least two diffusion sections through to the inner tubular wall, the inner tubular wall lined with a microporous membrane, the microporous membrane located at the at least two diffusion sections, wherein the catheter microporous membrane further comprising, an outer area and an inner area, the outer area having an interference fit with the inner tubular wall.

Claim 43 (Currently amended): The method of claim 395, wherein the pump is an implantable pump.

Claim 44 (Currently amended): The method of claim 395, wherein the pump is an external pump

Claim 45 (New): The method as recited in claim 39, wherein the solid section comprises a radio opaque material.

Claim 46 (New): The method of claim 40, wherein the pump is an implantable pump.

Claim 47 (New): The method of claim 40, wherein the pump is an external pump.

Claim 48 (New): The method as recited in claim 40, wherein the solid section comprises a radio opaque material.

Claim 49 (New): The method of claim 41, wherein the pump is an implantable pump.

Claim 50 (New): The method of claim 41, wherein the pump is an external pump.

Claim 51 (New): The method as recited in claim 41, wherein the solid section comprises a radio opaque material.

Claim 52 (New): The method of claim 42, wherein the pump is an implantable pump.

Claim 53 (New): The method of claim 42, wherein the pump is an external pump.

Claim 54 (New): The method as recited in claim 42, wherein the solid section comprises a radio opaque material.